Introduction/Announcements: Rayane AbuSabha welcomed all in attendance and introduced Town Hall host and ACEND Board member, Dr. James Swain.

James indicated the objectives for the virtual Town Hall:
- Provide ACEND update and announcements
- Provide an overview of Competency-Based Education (CBE)
- Discuss differences between existing 2017 Standards and FEM Standards
- Answer questions

James began with updates from ACEND. The draft 2022 Standards Survey was open for public comments between August 15 and November 18, 2020. More than 322 respondents completed the survey with close to 1350 comments in total. The Standards Committee is currently in the process of reviewing the comments and revising the Standards accordingly. It is anticipated that the revisions will be completed, and the Standards will be released, in summer of 2021. The implementation date for the Standards will be set for Summer 2021 for eligibility applications and June 1, 2022 for all currently accredited programs. If a program has a site visit before the 2022 implementation date, it will be able to do its self-study under the 2022 Standards if the program chooses to do so. All programs will need to come into compliance with the 2022 Standards once they become effective June 1, 2022.

James provided updates about recent ACEND Board decisions.
- During its August 2020 meeting, the ACEND Board lifted the moratorium on Didactic Programs in Dietetics.
- During its October 2020 meeting, the ACEND Board waived the substantive change fee for programs adding a graduate degree. This is to help assist programs in meeting the CDR graduate requirement. From now until December 31, 2023 the Board will not charge a fee to any program moving to the graduate level.
- Also, at its October meeting, the ACEND Board made a decision to no longer use the pass rate policy as a primary factor in making accreditation decisions, which means to put programs on reduced term or probation. This is in line with other accreditors’ policies. Passing the RDN or NDTR exam is a VERY important outcome for graduates of ACEND accredited programs; however, not meeting the pass rate benchmark will no longer be used on its own to place a program on reduced term or on probation. There are other indicators of program quality that the Board will take into consideration to ensure a more holistic review of program quality.
An update was then provided on activities related to the Future Education Model (FEM) Accreditation Standards. ACEND began the demonstration program process in 2017 and has accepted programs into the process in groups, called cohorts.

- In Cohorts 1, 2 and 3, ACEND accredited 33 Future Graduate Programs and 4 Future Bachelor’s. Overall, 19 programs are still in process.
- For Cohort 4, ACEND accredited 3 Future Graduate Programs and there are 25 programs from that cohort in process.
- For Cohort 5, 17 applications were received in December 2020 and they are currently under review. Programs contacted ACEND and requested that due to COVID-19 situation, to either extend the deadline for cohort 5 applications or to have a second call for applications. ACEND listened to this request and, as a result, a second call for Cohort 5 applications has been issued. Those applications are due on Monday May 3, 2021. The application to become a demonstration program can be found on the ACEND website at this link.

James reminded participants that on December 16, 2020 the Dietetics Preceptor Training Program Modules (8 CPEUs) that were available on CDR’s Online Campus went offline. This presents ACEND with the opportunity to update the preceptor modules. However, ACEND appreciates the value of this course to educators and the need to have it available while the content is being revised. To ensure a quick turnaround, ACEND moved the content to a new online course platform. Preceptors can now access the course from the ACEND website under “Training and Volunteer Opportunities”. The information was sent to educators last week to share with preceptors and has been added to the ACEND UPDATE posted on the website. The course remains free and ACEND is working on updating the content.

As the global pandemic continues to create challenges for programs and students, there is now hope that restrictions limiting students’ ability to complete supervised practice and experiential learning in healthcare settings may begin to ease with the release of the COVID vaccine. During Phase 1 distribution of the CDC COVID-19 Vaccination Program, the CDC recommends that paid and unpaid persons serving in healthcare settings who have the potential for exposure to COVID-19 be vaccinated. ACEND has developed a position statement for program directors to submit to state or local governmental agencies if they wish to seek approval for students, interns and faculty preceptors (the faculty who work as preceptors and accompany students/interns in healthcare) in supervised practice and experiential learning healthcare settings, to receive a vaccine during the Phase 1 distribution. James indicated that ACEND is not requiring students, interns or faculty in its programs to receive the COVID-19 vaccine as that is a program and institution decision. ACEND is only providing a letter of support for programs interested in pursuing permission for their students, interns and/or faculty preceptors in supervised practice and experiential learning to receive the vaccine at this time. The letter can be accessed on the ACEND COVID-19 webpage.

ACEND offers several workshops and modules specifically for program directors. These workshops are designed to help dietetic education program directors learn the latest accreditation standards and specific details on how to prepare for self-study reports, program assessment reports, and site visits. The next workshop that is based on the 2017 Accreditation Standards will be held virtually on March 4 and 5, 2021. New this year, and available on the ACEND website, are the online program director modules on the Future Education Model Accreditation Standards which specifically address the FEM Standards, competency-based education, and how to apply to become a demonstration program. In fact, today’s CBE presentation that Rayane will be giving is a modified version of one of the presentations in these new FEM modules. James said that program directors (and others) can register for any of these workshops and modules on the ACEND website, under Training and Resources. Other
useful workshops, including the recorded CBE workshop that is presented by ACEND consultant Leanne Worsfold, can also be found there.

James closed with a reminder of ACEND communications that include the monthly ACEND Update, quarterly Virtual Town Hall and availability of ACEND staff. He then turned the presentation over to Rayane who addressed competency-based education (CBE). This presentation is included in the recorded Town Hall link above.

Rayane thanked James for hosting and opened the Town Hall to questions and comments in the chat.

**General Comments**

- from Rayane AbuSabha: This Town Hall is being recorded. It will be posted on the ACEND website along with the slides.

Clarifying question: Will the future ACEND DI Director Town Halls be 1 hour, or should we allow 1-1/2 hour on our calendars as done in previous years to support the Q&A session?

- Rayane: Town Halls are aimed for program directors from all ACEND program types and not only DI programs. ACEND typically plans on one hour for the Town Halls unless the topic warrants the additional half an hour. The April 20, 2021 Town Hall will only be one hour long.

**Didactic Programs in Dietetics**

- How many new DIs have been approved since the moratorium has been lifted?
- Why is there a moratorium on DIs? When will it be lifted?

  - from Rayane AbuSabha: Moratorium is lifted from the DPD not DIs.

Just got an email from a new DI in Illinois stating it was just approved and is participating in the match.

- from Rayane AbuSabha: There is no moratorium on DIs. I was explaining that the moratorium was on DPDs.

Thank you for the clarification.

With decreasing numbers of applicants this will be a problem for existing programs.

  - James: Even before the pandemic we saw numbers start to change, from high school graduates. There seems to be cycles to this and we at ACEND are aware that these are issues that we will continue to monitor.

**Preceptor Training**

- When will the updated preceptor training modules be available?

  - Rayane: The module is currently available on the ACEND website. We are working on updating the module and we hope to have update available in 2022.

**FEM Programs**

- For the FG, are all the PIs required for each competency?

If a student needed more time, would it be an effective strategy to have all of those similar rotations to have the same performance indicators and competencies, such as for the various clinical sites? When planning rotations how do I guide the preceptors in what to include so all students are applying the same performance indicators?

  -
• James: Many programs would have an intervention for students who need additional help but use the same performance indicators within the same types of rotations for all students.
• Rayane: All of the performance indicators must be taught but don’t all need to be assessed or evaluated.

What are the CDR exam pass rates for FEM program graduates? How do they score in each domain?
• Rayane: These data are not yet available for ACEND. ACEND will share this information as soon as it is made available.

Can we apply to become an ACEND FEM reviewer?
• Rayane: If you are an ACEND reviewer for the 2017 standards then you can apply to become a FEM reviewer by sending an email to Jodi Wright at jwright@eatright.org. We encourage all program directors to apply to become reviewers of ACEND programs. This is a sure way to learn the ACEND Standards.

FEM standards are still separate from other programs' standards, correct?
• Rayane: Yes, the FEM standards are separate standards from the 2017 Standards and they are available for voluntary adoption. ACEND is still piloting these Standards and has not made a final decision on adopting them.

We are finding that the FEM in our small, urban state is needing a disproportionate amount of time in clinical sites because of the CBE and PIs--which is making it very difficult for the other DIs in the state to find adequate access to sites.

**Draft 2022 Standards**
Has there been any consideration of postponing implementation of updated standards until 2023 or later to acknowledge the realities the COVID pandemic continues to have on all our programs and their directors? Updating standards in each program is a TREMENDOUS amount of work and we’re already crushed with current issues and realities.
• Rayane: For USDE we have to review the Standards every five years but we will definitely add to the Standards Committee agenda.

Do the 2022 standards factor in educational equity? It seems programs like DI’s that are unable to host FEM programs are being put at a disadvantage with our time-based setup.
• James: The updates and changes that are in those enhance and reflect much of the developing thinking in educational programs and accreditors throughout the nation. The Standards Committee is looking at the FEM Standards as well and looking at ways to adjust and improve them.

**Competency Based Education (CBE)**
I understand the concept, however since we are a graduate program that is still course/GPA based, we are a bit constrained.
Are we striving to achieve competence or proficiency? Proficiency is defined by lifelong learning as only achieved after several years in the field, I believe?
I think the examples you are giving are much more university-based, not DI based. Especially free-standing hospital-based DIs that are already very competency based. 
I was just thinking the same thing, Robyn. Our program is a stand-alone DI within a teaching hospital, and this is really how we already approach our interns’ education. 
For an experiential learning rotation - would the CBE model expect all clinical rotation areas to have the same competencies/performance indicators included so the student can build over time? 
As a Coordinated Program we already integrate learning with supervised practice. 
Yes, we’re in a teaching hospital, too. 

Regarding FEM CBE...rubrics should include these, no matter whether it is a DI, CP, FEM, etc. 
That is a nice idea and works when you have students who can recognize their abilities and areas they need to focus on. Sometimes that isn't so clear to them though. It will be a good lesson for them to learn during their training versus in their first jobs. 
It is hard to be that flexible with our sites. They want schedules and to know what/where/when with the students. It is hard to be this flexible when working with other professions. 
Agree. And we are semester bound because students need to be enrolled in a course in order to be covered by the university's insurance policy. 
We continue to have a preceptor crisis, especially for clinical acute care sites. How are the preceptor/sites in FEM programs being trained, supported and encouraged to even participate? Especially for a distance program? 
I still feel that Rayane is talking more to DPD directors than DI directors. 
That is a challenge I am having. Preceptors don't understand the FEM and prefer to have students at the end of their education and for a set amount of time. 
- Rayane: Please listen to the entire presentation to learn of the differences. 

Will internships and FBs be going to competency-based education? 
- James: Internships and FBs are required to meet the Standards under which they are accredited. The upcoming 2022 Standards include some CBE but the FEM Standards have more rigorous CBE Standards. 
- Rayane: FBs are under the FEM Standards and they already include competency-based education. 

Preparation of Students for Entry-level Employment 
If DPD grads report not being prepared for their first job, that is the job of the DI. We build on the didactic skills and prepare and train them for their first job. 
"....many report that they did not feel well prepared for the job market...": This info is old and definitely does not reflect the views of several hundred graduates of our program. 
Nor does it reflect the views of employers of graduates from our traditional stand-alone DI program. 
I think that is true. I have often felt the students coming from DPD programs aren't prepared for the DI, but we prepare them for practice in the DI. 
Our classes of interns have differing levels of readiness for the DI, and we also see some trends from specific universities. 
- Rayane: The work and research that went into the ACEND Rationale document posted on the ACEND Future Education Model webpage confirm the views of employers where they felt graduates needed more training, especially on their professional skills. The percent of Americans
who strongly agree that college graduates are well prepared for success in the workplace continues to decrease. Recent Gallup polls have increasingly shown decreased confidence in the preparation of graduates. Results from the 2017 College Student Survey indicated that “only a third of students believe they will graduate with the skills and knowledge to be successful in the job market (34%) and in the workplace (36%).” The results mirror the 2018 College Student Survey.

I’m wondering if graduates stating they felt unprepared in some areas that reducing the amount of hours from 1200 to 1000 is really going to be beneficial to the student.

• Rayane: Moving from 900 to 1200 hours there were little data that supported this move. Exam pass rate did not improve after this increase in supervised practice hours. The cost to students of moving from 900 to 1200 hours was not supported by data. ACEND has been in contact with the Consumer Protection and Licensure Sub-Committee (CPLS) to discuss the optimum hours needed for licensure. Relief to programs during COVID supported the permanent change to 1000 along with data from CPLS.

Will 1000 hours meet minimum hours for licensure in all states?

• Rayane: CPLS assured us that this will meet the licensure requirements in all states.

Thank you - it is 900 here in PA but I wasn't sure about other states!
But it looks like CBE likely might require more hours so 6 of one and half a dozen of another.
We have had one DI class graduate with just over 1000 hours - 100% pass rate, 4 secured professional positions before finishing the internship. And 9 of 10 have secured jobs. All are doing well thus far.

**2024 Graduate Degree Requirement**
CDR's 2024 Mandate is definitely affecting and will continue to result in a decrease in applicants, particularly those of diverse backgrounds. I think we also need to consider our responsibility to the profession and to the interns/potential future RDs themselves that some may not be suited to the profession. Dena French's work on the "Failure to Fail" is not only thought-provoking but vital. This is difficult for both program directors and preceptors.

The next Town Hall is scheduled for Tuesday, April 20, 2021 at 11 am Central Time.

Rayane and James thanked everyone (97 participants) for their discussion on the Town Hall. The call ended at 12:30 pm CT.
Welcome to the ACEND Virtual Town Hall
Rayane AbuSabha, PhD, RD
ACEND Executive Director
Objectives

- Provide ACEND update and announcements
- Provide an overview of Competency-Based Education (CBE)
- Discuss differences between existing 2017 Standards and FEM Standards
- Answer questions
ACEND Updates and Announcements
Proposed Draft 2022 Standards

- Survey to evaluate the draft 2022 Accreditation Standards was open for public comment between August 15 and November 18, 2020
- More than 1,350 comments were received
- Standards Committee in the process of reviewing comments and revising the Standards
- Anticipated revisions to be completed summer 2021
Proposed Draft 2022 Standards

- Released in Summer, 2021
- Implementation date:
  - Summer 2021 eligibility applications
  - June 1, 2022 all accredited programs
- All currently accredited programs must come into compliance on June 1, 2022
New ACEND Board Decisions

- Lifted the moratorium on Didactic Programs in Dietetics (August 2020)
- Waived the substantive change fee for programs adding a graduate degree (October 2020)
- Removed the current Pass Rate Policy from the P&P Manual to allow for a more holistic approach to reviewing programs (November 2020)
Future Education Model Accreditation Standards
Associate (FA), Bachelor’s (FB), Graduate (FG)
## FEM Standards Demonstration Programs

<table>
<thead>
<tr>
<th>Cohort</th>
<th>Programs Status</th>
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</table>
| **In Cohorts 1, 2 & 3** | 33 Future Graduate  
4 Future Bachelor’s  
19 programs in process |
| Cohort 4   | 3 Future Graduate  
25 programs in process |
| **Cohort 5** | 17 applications under review |
| **Cohort 5 2nd Call** | Applications due Monday May 3, 2021  
Posted on the ACEND website:  
[https://www.eatrightpro.org/futuremodel](https://www.eatrightpro.org/futuremodel) |
The *Dietetics Preceptor Training Program Modules Course* (8 CPEUs) is now available on the ACEND website:

https://www.eatrightpro.org/acend
ACEND Position Statement on the COVID-19 Vaccination

- ACEND letter supporting programs that wish to seek approval for students, interns and faculty preceptors in supervised practice and experiential learning healthcare settings, to receive a vaccine during the Phase 1 distribution

- Letter posted on ACEND COVID-19 webpage

Program Director Workshops and Online Modules

Upcoming Workshops

- **2017 Program Director Workshop Virtual**
  - March 4-5, 2021

- **CBE Workshop** – presented by Leanne Worsfold (5 CEUs)

- **NEW! FEM Program Director Online Modules** (8 CEUs)

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**Training and Volunteer Opportunities**

ACEND provides opportunities for both accreditation and dietetics and nutrition professionals to expand their knowledge with professional development resources.

- Preceptors and Mentors
- Program Reviewers
- Training and Resources
- Dietetics Preceptor Training Program

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**Communication from ACEND**

- **ACEND Update**
  - Periodic update from ACEND posted on the website

- **Virtual Town Hall**
  - Next town hall: Tuesday, April 20 at 11:00 am – 12:00 noon Central Time.
  - Directions for joining on the ACEND website

- **ACEND Staff**
  - 800-877-1600 x5400
  - acend@eatright.org
Last fall, the NDEP council shared a survey of program directors with ACEND. In that survey we found a lot of comments about how there is no difference between the 2017 standards and the FEM standards in terms of competency-based education. Because we have the core competency statements in the 2017 standards, these are the CRDNs and CNDTs, the thought was programs are engaged in competency-based education. The survey made it clear that we needed to clarify these differences. But before I start, I want to emphasize two concepts:

• First, the 2017 programs perhaps are doing CBE, but this is not an ACEND expectation in the 2017 Standards. This is an expectation in the FEM standards. ACEND is not even looking for it when reviewing 2017 programs.
• Second, I hope that after today’s presentation, the concept of CBE that ACEND is using, will be made more clear and we can clearly show the differences between the two sets of standards when it comes to what we mean by CBE in the FEM standards and why it is different from the 2017 standards.

• Today’s town hall is being recorded and will be posted on the ACEND website for later review.
Competency-Based Education

<table>
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<tr>
<th>Definition</th>
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<tr>
<td>▪ Outcomes-based approach to the design, implementation, assessment and evaluation of a program using an organizing framework of competencies.</td>
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<tr>
<td>▪ “Start with a clear picture of what is important for students to be able to do (competencies) in the future, then organizing the curriculum, instruction, and assessment to make sure this learning ultimately happens” (Spady, 1994:1).</td>
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To start I will go through the general definitions of CBE and then I will highlight the differences between the 2017 and FEM standards.

The key in CBE is the focus on identifying what students need to be able to do in the future—these are the competencies. Then the curriculum, the planning instruction and the assessment focus on making sure these competencies are demonstrated.
In Competency-based education (→) Students gain the knowledge and skills and then demonstrate these knowledge and skills by engaging in learning exercises, activities and experiences (→) that are aligned with clearly defined program outcomes.
In the Future Education Model we call these program outcomes the competencies and they are clearly defined and detailed by the performance indicators. This is key to the differences between the 2017 standards and the FEM standards.
In a recent report on what is competency-based education, Levine and Patrick revised the definition of CBE. They stated that in CBE,

1. Students are empowered daily to make important decisions about their learning experiences, how they will create and apply knowledge, and how they will demonstrate their learning.

2. Assessment is a meaningful, positive, and empowering learning experience for students that yields timely, relevant, and actionable evidence.

3. Students receive timely, differentiated support based on their individual learning needs.

4. Students progress based on evidence of mastery, not seat time.

5. Students learn actively using different pathways and varied pacing.

6. Strategies to ensure equity for all students are embedded in the culture, structure, and pedagogy of schools and education systems.

7. Rigorous, common expectations for learning (knowledge, skills, and dispositions) are explicit, transparent, measurable, and transferable.
Competency-Based Education

CBE

- CBE is an outcome-based approach
  - designed to enable a “progression of competence”
  - an emphasis on abilities
  - a de-emphasis of time-based training
- Promotion of learner-centeredness
- Tailored to different learning abilities

CBE is designed to enable a progression of competence. It emphasizes the demonstration of ability and de-emphasizes time-based training. In traditional models, time-based students progress to the next level based on time even if they have not mastered the material.

CBE focuses on the learner and promotes learner-centeredness. This is because it is tailored to different learning abilities. It allows students more time if needed to learn skills or to move more quickly when skills are learned in a shorter period of time than expected.
Laitinen stated, “If institutions are clear in determining what they want students to know, what students already know, and how to credit what students do know, they can spend their time focusing on what students do not yet know”

I want to take a moment to dissect this statement.
“If institutions are clear in determining what they want students to know, what students already know, and how to credit what students do know, they can spend their time focusing on what students do not yet know.”

Competencies and Performance indicators

Laitinen, 2012

“If institutions are clear in determining what they want students to know, (those are the competencies that are defined by the performance indicators, the program outcomes)...
"If institutions are clear in determining what they want students to know, what students already know, and how to credit what students do know, they can spend their time focusing on what students do not yet know."

Prior Learning Assessment

Laitinen, 2012

....what students already know (this is achieved through prior learning assessment)....
“If institutions are clear in determining what they want students to know, what students already know, and how to credit what students do know, they can spend their time focusing on what students do not yet know”

Laitinen, 2012

...and how to credit what students do know (this is done through formative and summative assessment).
“If institutions are clear in determining what they want students to know, what students already know, and how to credit what students do know, they can spend their time focusing on what students do not yet know”

These three concepts, competencies and performance indicators, formative and summative assessment, and prior learning assessment or PLAR form the tenets of CBE.
Of course, “What students do not yet know” is different for each and every student. That is where CBE becomes more student-centered, focusing on what each student still needs to learn.
Student learning experiences are more personal in CBE. For example, when a student knows that they need more practice in a specific skill, let’s say developing educational materials, the student would make the request from their preceptor to practice the skill and then they are assigned a couple of educational materials to work on. This is sometimes happening in our current traditional programs, but because the competencies are not well defined or well articulated with the PIs, the skills the student needs to work on are not often being identified so that we can help improve them. In the 2017 standards, the way the competencies are written, we can identify general skills, but we do not hone in on the specific details. So the opportunities to improve those skills are sometimes lost or they are minimal.
In the FEM, each competency is defined by a number of performance indicators or PIs. These performance indicators are the specific skills the students need to learn. Let me give you an example of the importance of these PIs.

Competency 2.4 is “Implements or coordinates nutritional interventions for individuals, groups or populations”. In the FEM standards, this competency has 3 sections: MNT, Education, and Counseling. Each section has a number of PIs. Under the education section alone, you have 7 PIs or skills the students need to achieve and some of these you see summarized on the slide:

2.4.6 **Applies education theories** when developing, education materials.
2.4.7 **Assesses audience’s readiness** to identify barriers to learning.

2.4.8 **Develops nutrition education materials.**

2.4.10 **Translates** basic to advanced food and nutrition **science knowledge into understandable language.**

2.4.11 **Evaluates effectiveness of nutrition education** and makes modifications as required.

**And 2 more that you do not see on the slide.**
With all these PIs that define each competency, you can now see how in CBE the competency is often addressed in multiple ways throughout the curriculum using those PIs. This is because each competency has a number of performance indicators and these PIs get distributed throughout the curriculum. Students will have a chance to demonstrate their ability to meet or to master these performance indicators (all of them or a set of them) in a number of courses or supervised experiential learning activities. At one point in time if a student does not meet the expected outcome, then a plan for remediation will be set. This could be through an extra assignment, an exam, more time in practice, providing them with alternate experience, or even knowing that they will be exposed to that skill again in future courses or in future supervised experiential learning (SEL) activities. Eventually, the students demonstrate that they mastered that skill.

The program gets to decide what mastery means for each competency. You, as the program director along with your stakeholders (that could be faculty, preceptors or advisory board) and based on experience, you set what it means to master a skill. (For one skill this could be perhaps getting 50% on an assignment or group of assessments, and for another skill, for example writing a PES statement, the students need to demonstrate that correctly 90% of the time).
The Competency-based model adopts the stance that learning should be cumulative and additive and should lead to the development of the ‘whole’ or ‘competent’ person the institution would like to produce.

Grades are not essential but instead formal evaluations are structured to measure that students are meeting the competencies for the degree. The level and type of evaluation varies and could be as simple as pass – does not pass or meet – does not meet the competency.

That is because the student can either perform the skill or not. If they cannot perform the skill, then they need more practice.
We have taken the stand at ACEND that CBE is a shift from the traditional education model. The traditional education model that is not competency-based has a more limited set of academic outcomes:
There are a number of competencies, but these are not well defined by the performance indicators which means that they are not well articulated to define the skills needed to be achieved by the students.

A student may pass a class, may get a good grade on an assignment, but nothing guarantees that the student has mastered the competency or is able to perform the skills needed for that competency. I want to give you an example in a clinical setting because we know that students are being observed and graded on their clinical skills in a professional work setting. But I want to highlight how even in this setting and with the close observation, we miss some skills. Let us take counseling as an example. Here a student or intern may get a passing grade on a counseling observation, but that student did not use simple language to translate the science to the patient. This is a skill that should be mastered and by receiving a passing grade on the counseling session, the message is that the student has passed all the skills involved in completing a counseling session.

The traditional model then has variable expectations where not all students are expected to perform at the same level. Grading and passing a course is often based on class average
or on a bell curve where some students do better than other students.
To contrast that in CBE, grading is no longer on a bell curve. In a bell-shaped curve model only the top half who are prepared enough and learn fast enough will succeed. But time is not a measure of achievement. Time actually limits the opportunity to achieve the skills to the fortunate few. An underprepared or underserved student needs more time to learn and be successful. The great inequity of the credit hour is fixing time so that we can rank and sort students by grades and quartiles instead of setting equitable proficiency levels that we aim for, so that all students are taught and are able to succeed.
Competency-Based Education

CBE and traditional model

The performance indicators (PIs), coupled with a good assessment, allow faculty to identify explicitly what is good or bad about a student’s performance of a given skill helping the student improve that performance.

Garn, 2019

Having the Performance Indicators, along with a good assessment, will help faculty identify clearly what is good or bad about a student’s performance of a specific skill.
To summarize these concepts, the traditional non-CBE model assumes that not all students have strong potential which limits student outcomes.

It has high levels of variability in terms of expectations for student learning – and these differences create inequities.

Students often do not know what they need to improve. They get the grade but they are not sure what they need to do next, to do better. Think of papers that get corrected.

The traditional model is time-based: Students progress to the next level even if they have not mastered a number of the expected skills.

And finally, the Traditional Model emphasizes summative assessment and does not give enough attention to formative assessment which helps students advance in their learning.

Learning in this type of program is measured by a student’s time in seat, courses taken, and graded assignments.
Competency-Based Education

CBE and traditional model

With its focus on all students achieving proficiency, regardless of the time it takes, competency-based education provides equitable equality

(Garn, 2019)

“Educational equity means that each student receives what he or she needs to develop to his or her full academic potential.”

National Equity Project, 2020

Now let us contrast this with CBE: CBE’s focus is on all students achieving proficiency, regardless of the time it takes. With this concept in mind, you can see how competency-based education provides equitable equality. Educational equity means that each student receives what they need to develop to their full academic potential.
## Benefits of Competency-Based Education

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<td>▪ Feedback is much more specific for learners who are struggling to help them excel</td>
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Royal College of Physicians, 2020

What are some the key benefits of CBE?
▪ Articulates exactly what the expectations are (PIs)
▪ Improves assessment data to make decisions and leads to better feedback for students
▪ The explicit articulation and translation of the competencies into performance indicators let students know clearly what they can achieve during their time in the program
▪ Faculty and students have documentation of student progress and are able to more easily identify struggling learners early on
▪ Feedback becomes part of day-to-day culture
▪ Feedback is much more specific and more tangible for students who are struggling, to help guide them to adjust their skills and help them excel
Benefits of Competency-Based Education

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</tr>
<tr>
<td>▪ Key motivation for adopting CBE is to serve nontraditional students and to respond to workforce needs</td>
</tr>
</tbody>
</table>

*American Institute of Research, 2019*

Evaluations of CBE have also shown some benefits. A CBE survey of 501 college and university administrators indicated that a key motivation for adopting CBE is to serve nontraditional students and to respond to workforce needs.
### Benefits of Competency-Based Education

<table>
<thead>
<tr>
<th>Key Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Outcomes of transforming a pharmacy MS program from didactic to CBE (outcomes collected between 2013 and 2017)</td>
</tr>
<tr>
<td>▪ Student satisfaction increased from 4.3/6 to 5.1/6</td>
</tr>
</tbody>
</table>

*Chisholm, 2019*

Students like and appreciate CBE programs. In an evaluation of a Master of Pharmaceutical Medicine program in Sydney Australia, this program was transformed from a didactic model to a professional competency-based program. The evaluation showed that student satisfaction significantly increased from 4.3 on a scale of 6 to 5.1.
Possible Benefits of Competency-Based Education

<table>
<thead>
<tr>
<th>Concept is appealing to employers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interviews with employers reveal</td>
</tr>
<tr>
<td>• Competency and experience were more valuable to the employer than a college degree</td>
</tr>
<tr>
<td>• Employers want documentation that graduates achieved a desired skill level, instead of a grade or degree</td>
</tr>
<tr>
<td>• The ability to provide a document that validates the skills and knowledge graduates obtained in college and that verifies their mastery of those skills helps employers feel more confident about the hiring decision</td>
</tr>
</tbody>
</table>

Chisholm, 2019; Sutcliffe, et al., 2005; Gauthier, 2019

Being a relatively new field, the research is sparse on the benefits of CBE to employers. There are a few qualitative studies published that looked into what employers want from entry level professionals. These studies found that:

- Competency and experience were more valuable to the employer than a college degree;
- Employers want documentation that graduates achieved a desired skill level, instead of having received a certain grade or degree; and
- The ability to provide a document that validates the skills and knowledge that graduates gained in college, and that verifies their mastery of those skills, helps employers feel more confident about the hiring decision.
Now that I’ve defined CBE and detailed some of its benefits compared to the traditional education model, I want to speak specifically to the ACEND Future Education Model Standards.
Competency-Based Education

<table>
<thead>
<tr>
<th>CBE and traditional model</th>
<th>X</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Hybrid model</td>
<td></td>
</tr>
<tr>
<td>- Credits are set</td>
<td></td>
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<tr>
<td>- Times in rotation are set</td>
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<tr>
<td>- Supervised Experiential Learning (SEL) is woven throughout the program</td>
<td></td>
</tr>
<tr>
<td>- Coupled with reflective practice, students adjust their experiences to match their own pace and abilities</td>
<td></td>
</tr>
<tr>
<td>- Students should take ownership of their own learning</td>
<td></td>
</tr>
<tr>
<td>- Students are consciously competent vs unconsciously incompetent</td>
<td></td>
</tr>
</tbody>
</table>

Because many of the ACEND programs need the course credits and they also need to meet the 1000 hours of experiential learning for licensure requirements, most of the FEM programs are hybrid models where the credits are set and the time in rotations is not very flexible.

But in CBE, the supervised experiential learning (or SEL) is woven throughout the program and starts early, giving the student enough time for reflection and gives the faculty enough time to evaluate the students’ skills to judge if they mastered that skill. (We also call these skills the performance indicators.) With the evaluations being set early on in the curriculum, this will give students the opportunity to adjust to the next experiences to help them master the skills that they need to master.

So in CBE, students need to take ownership of their own learning; and this is key to its success. With the reflective practice, the students then become consciously competent and will know how well they do a skill, why they do it and how to adjust it. This is in contrast to being unconsciously incompetent where the student receives a passing grade on a skill, let’s say for example a passing grade in a counseling course, with the possibility that the student is deemed competent, but they are not able to actually give a group education session or they are good at the act of counseling but don’t know how to apply motivational interviewing.
Now let’s look at some of the major differences in the 2017 Accreditation Standards and the Future Education Model Accreditation Standards. While we do some form of competency-based education in the 2017 Standards, we have competencies and we have supervised practice, the CBE focus is much more so. Let me explain why.
ACEND Accreditation Standards

Differences in Standards

Future Education Model Standards
- Define expected student outcomes (competencies) and measures (performance indicators)
- Require a fully integrated program with supervised experiential learning and competency assessment throughout the program

The Future Education Model Standards define the expected student outcomes, and these are the competencies and they also identify the performance indicators which measure the skills to meet each competency. The existing 2017 standards are narrow in defining the skills and don’t have measuring criteria (which are the PIs) to define the depth and breadth of each competency. The requirement in the FEM Standards is for the curriculum to be fully integrated where didactic teaching, experiential learning, and feedback are woven throughout a single program.
Let us compare a Coordinated Program (CP) structure under the 2017 Standards to a Future Graduate (FG) Program under the FEM Standards.
The structure of a typical coordinated program includes both the didactic and supervised practice sometimes integrated together but this is sometimes done in chunks or pieces each done separate from the other. Didactic first then supervised practice. Some CP programs have done a great job integrating the two, but this was not an expectation of the Standards so many CPs have stayed separate or included minimal integration.
In an FEM program the expectation is that the supervised experiential learning is fully integrated throughout the program intermingled with the didactic. The students will learn and then will practice and do what they learned.
Putting them side to side you can see how similar the structures of the two programs are and like I said, a fully integrated CP program is identical, in structure, to an FG program. What differentiates them are the “PIs”, the performance indicators.
The question we often get is what a bachelor’s CP needs to do to move to a Future Graduate (FG) Program?

1. First, revise the curriculum to adopt competency-based education (CBE) and assessment. (This means incorporate the new and enhanced competencies and the performance indicators.)
2. If it has not already done so, the CP will need to integrate experiential learning with didactic education throughout the program.
3. Move to the graduate level.
The Importance of Performance Indicators

Although 90% of college graduates are prepared for the job market, many report that they did not feel well prepared for the actual skills required of the job.

(Book, 2014; Newman et al., 2004)

Essential Professional Skills
- Public speaking
- Flexibility
- Teamwork
- Communication
- Time management
- Leadership
- Personal skills

What is so important about the performance indicators and why they are key to CBE and the FEM Standards? One reason is the better preparation of graduates. Although 90% of college graduates are prepared for the job market, many report that they did not feel well prepared for the actual skills that were required for their first job. And as you know and I alluded to earlier, employers are asking that students graduate with these skills, especially the professional skills. The PIs are those skills and by articulating them and ensuring they each are addressed in the curriculum, we ensure that students are graduating with these skills and feel well prepared for the job.
The Importance of Performance Indicators

<table>
<thead>
<tr>
<th>FEM Competencies vs CRDNs</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>2017 CP Standards</strong></td>
<td><strong>X</strong></td>
</tr>
<tr>
<td>CRDN 3.1 Perform the Nutrition Care Process and use standardized nutrition language for individuals, groups and populations of differing ages and health status, in a variety of settings.</td>
<td>No Performance Indicators</td>
</tr>
<tr>
<td><strong>FG Standards</strong></td>
<td></td>
</tr>
<tr>
<td>2.3 Utilizes the nutrition care process with individuals, groups or populations in a variety of practice settings.</td>
<td></td>
</tr>
<tr>
<td>27 Performance Indicators to define the skills related to this competency</td>
<td></td>
</tr>
</tbody>
</table>

To show you how important these performance indicators are, I want to take the Nutrition Care Process competency as an example. This is Competency CRDN 3.1 in the 2017 Standards. In the FEM Graduate FG Standards, this is competency 2.3.
The Importance of Performance Indicators

Existing 2017 Standards CRDN 3.1

CRDN 3.1 – Nutrition Care Process

In the existing 2017 standards that use the traditional model, CRDN 3.1 has no performance indicators to define the skills it entails.
The Importance of Performance Indicators

<table>
<thead>
<tr>
<th>Nutrition Assessment</th>
<th>Competency 2.3 – Nutrition Care Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Selects and implements nutrition assessment tools</td>
<td></td>
</tr>
<tr>
<td>Performs calculations to determine nutritional requirements</td>
<td></td>
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<tr>
<td>Identifies signs and symptoms of nutrient deficiencies or excesses</td>
<td></td>
</tr>
<tr>
<td>Determines accuracy and currency of nutrition assessment data</td>
<td></td>
</tr>
<tr>
<td>Interviews client/patient</td>
<td></td>
</tr>
<tr>
<td>Conducts a NFPE</td>
<td></td>
</tr>
<tr>
<td>Takes medical history</td>
<td></td>
</tr>
<tr>
<td>Identifies patient appropriate validated formula</td>
<td></td>
</tr>
<tr>
<td>Orders, collects and interprets biochemical tests</td>
<td></td>
</tr>
<tr>
<td>Collects, assesses and interprets anthropometric measures and body composition</td>
<td></td>
</tr>
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In the FEM standards, each competency has a set of performance indicators that are organized from basic to more advanced. For example, for competency 2.3, the Nutrition Care Process (NCP), the first set of performance indicators address nutrition assessment. Like you see on the screen, under nutrition assessment, we have identified 13 performance indicators and they define the skills needed for a student to master the assessment category of the NCP.
But Assessment skills are not the only skills that define the nutrition care process competency. We layer on top the PIs that fall under diagnosis. These are:

2.3.13  Analyzes and synthesizes nutrition assessment data;
2.3.14  Devises PES statement: and
2.3.15  Prioritizes the nutrition diagnosis(es).
We continue with Performance indicators or skills needed for the intervention component and these are in green color:

2.3.16 Develops an individualized plan of care;

2.3.17 Orders nutrition prescriptions; and

2.3.18 Implements the nutrition plan of care or nutrition intervention.
Then layer more skills for Monitoring and Evaluation. You see these in bright pink: examples are “identifies barriers” and “assess client or patient’s compliance”.

<table>
<thead>
<tr>
<th>Monitoring/Evaluation</th>
<th>Evaluates</th>
</tr>
</thead>
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<tr>
<td>Selects and implements nutrition assessment tools</td>
<td>Determines accuracy and currency of nutrition assessment data</td>
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<tr>
<td>Develops an individualized plan</td>
<td>Conducts a NFPE</td>
</tr>
<tr>
<td>Performs calculations to determine nutritional requirements</td>
<td>Interviews client/patient</td>
</tr>
<tr>
<td>Monitors and evaluates impact of nutrition intervention</td>
<td>Identifies patient appropriate validated formula</td>
</tr>
<tr>
<td></td>
<td>Orders, collects and interprets biochemical tests</td>
</tr>
<tr>
<td></td>
<td>Summarizes impact of nutrition interventions</td>
</tr>
<tr>
<td></td>
<td>Orders nutrition prescriptions</td>
</tr>
<tr>
<td></td>
<td>Prioritizes the nutrition diagnosis(es).</td>
</tr>
<tr>
<td></td>
<td>Communicates reasons for deviation</td>
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</tr>
</tbody>
</table>

Competency 2.3 – Nutrition Care Process

- Identifies barriers
- Summarizes impact of nutrition interventions
- Orders nutrition prescriptions
- Prioritizes the nutrition diagnosis(es.)
- Communicates reasons for deviation
Benefits of Competency-Based Education

**Documentation**

- Selects and implements nutrition assessment tools
- Develops an individualized plan
- Interview client/patient
- Conducts a NFPE
- Takes medical history
- Assesses physical activity
- Collects, assesses and interprets anthropometric measures and body composition
- Orders, collects and interprets biochemical tests
- Analyzes diagnostic test results
- Monitors and evaluates impact of nutrition intervention
- Identifies signs and symptoms of nutrient deficiencies or excesses
- Identifies signs and symptoms of nutrient deficiencies or excesses
- Performs calculations to determine nutritional requirements
- Orders, performs, and interprets nutrition assessments
- Summarizes impact of nutrition interventions
- Devises validated formula
- Performs calculations to determine nutritional requirements
- Analyzes and synthesizes nutrition assessment data
- Identifies patient appropriate validated formula
- Prioritizes the nutrition diagnosis(es).
- Communicates reasons for deviation
- Identifies barriers
- Devolves PES statement
- Assesses client/patient’s compliance
- Determines accuracy and currency of nutrition assessment data
- Evaluates the availability of health services
- Identifies barriers
- Develops and applies nutrition care outcome indicators
- Takes medical history
- Assesses physical activity
- Identifies barriers
- Summarizes impact of nutrition interventions
- Communicates reasons for deviation
- Identifies barriers
- Devolves PES statement
- Assesses client/patient’s compliance
- Determines accuracy and currency of nutrition assessment data
- Evaluates the availability of health services
- Identifies barriers
- Develops and applies nutrition care outcome indicators
- Takes medical history
- Assesses physical activity
- Identifies barriers
- Summarizes impact of nutrition interventions
- Communicates reasons for deviation

And then finish with the skills required for Documentation in blue

(➔) 2.3.26 Documents all elements of the nutrition care process

(➔) 2.3.27 Demonstrates coding and billing procedures.
When we transpose CRDN 3.1 under the traditional 2017 Standards compared to the FEM Standards, you realize how the PIs define the competency and articulate all the skills needed for that competency. This is the essence of CBE in the FEM Standards.

The student does not get evaluated on CRDN 3.1 and be declared competent in performing the NCP. Instead, the student is being evaluated on 27 different skills that are part of the NCP. If a student is not proficient in some of these skills, the student, the faculty and/or the preceptor will be alerted to make sure that skill gets addressed. I want to point out that addressing remediation does not always have to fall on the faculty or preceptor. The students can be made responsible for meeting the competencies, and once they realize that they have not mastered a specific skill they can themselves identify and suggest ways to improve.
In competency-based education learning is cumulative and additive, leading to the development of the ‘whole’ or ‘competent’ person that the institution would like to produce.

The way CBE has been developed in the FEM programs, the students will have opportunities to study and practice a skill many times and in many different settings to make sure that they are competent at performing all facets of that skill. Let’s again take counseling as an example. First the student will learn in class about the theories of behavior change and nutrition education and do a project for that class.
In CBE Learning Is Cumulative

Then what they learned in the classroom is followed by a rotation of a few hours at the farmer’s market where the students are practicing educating the market’s customers.
This is followed by more didactic teaching on motivational interviewing and facilitation with practice activities in the classroom; for example, role playing motivational interviewing techniques. The student then spends three weeks at the WIC clinic where they observe group education and then follow it by conducting a class or two with WIC participants. At this point the student has been getting evaluated on these skills from many groups (the faculty, farmer’s market clients, perhaps extension preceptor and WIC preceptor and maybe even the WIC participants).
The students then advance in the curriculum and study Medical Nutrition Therapy and within that course they learn about counseling for various disease states. During the same semester, they are scheduled for 2 weeks at a long-term care facility where they get the opportunity to practice and be evaluated on their counseling skills in LTC. We have some FG programs that have designed the students’ schedules so they are in the classroom 3 or 4 days a week and in their rotations the other days of the week. This gives the students the opportunity to practice at the same time what they are learning in the classroom.
In CBE Learning Is Cumulative

Counseling Skills

- SEL: Acute Care
  - Formative & Summative: Counseling patients
- Didactic: MNT Counseling
  - Formative: Case Study
- Didactic: Motivational Interv.
  - Formative: Role-Play
- SEL: Farmer’s Market
  - Formative Assessment: Educating customers
- SEL: WIC
  - Formative: Group Education
- SEL: Long Term Care
  - Formative: Case Study
- DIDACTIC: Behavior Change
  - Formative Assessment: Project

The students’ final assessment of counseling ability takes place during their last semester during their acute care rotation at the hospital.

Throughout this time the student is reflecting on their knowledge and skills and making judgment about their performance and how to improve. The faculty is supporting the student and helping them adjust. If a student does not do well at one stage and needs more practice, let’s say they struggle when educating the farmer’s market customers, then during their WIC rotation, the student would request to spend more time educating clients rather than developing brochures (because, let’s say they have mastered that skill). Same with long-term care (LTC), if the student did well with malnutrition but is struggling in diabetes counseling, they would request to spend more time in the hospital on diabetes counseling. Perhaps the hospital has an outpatient clinic where the student can spend a few evenings sharpening their counseling skills.

This is how the performance indicators give the students the power to take control of their own learning.
Reflecting on Performance is Key in CBE

With that being said, it becomes clear that reflective practice in CBE and incorporating reflection are key to helping students become consciously competent instead of unconsciously incompetent and to guide their own learning.
I want to end this presentation, by quickly addressing another difference in the Future Education Model compared to the 2017 Standards and that is the level of performance of the competencies.

The ACEND competencies are built upon three levels of competency development following those shown in Miller’s Competency Pyramid. Competency development starts at the “knows” level with students showing their ability to gather and interpret information. Students then move to the “shows” level and begin demonstrating their ability to perform, typically in simulated or role play situations. The highest level of the pyramid is the “does” level where the competencies are demonstrated in actual workplace settings and it also could be in alternate situations.

For example, in the course Introduction to Nutrition, a student can learn the Food label and answer multiple choice questions about the components of the food label and how many calories are in each of the macronutrients. This would be the “Knows”. Then, the student will have an exam sheet or some homework that has the food label with different nutrient amounts and then they are asked to calculate amount of calories from carbohydrates, or the percent of daily needs of fiber that comes from that food. Students could also be asked to explain what does the amount of fiber mean in terms of health. This is the “Shows”.
The “Does” is the 3-day diet project where they are actually collecting all the foods a fellow student or family member ate in real-life, calculating all their nutrient intake, comparing it to the nutrient requirements and coming up with recommendations. Here they are actually doing what a dietitian would do in practice. Again, scaffolding learning and building on each other.
Summary

Future Education Model Standards

We know the great quality of our ACEND programs and we know that the majority of you are going above and beyond ACEND’s minimal expectations set in the 2017 Standards, and that you are doing portions of what we are expecting from the programs that are now under the FEM Standards.

You are scaffolding the learning, building skills, you are giving students experiences, you are giving formative feedback, assessing learning, doing remediation, teaching at different levels of competence, and much more…. But are you doing this for all the competencies? Are you integrating the entire curriculum with practice activities? Do all the courses have real experiences? Are students given the chance to practice what they learned in the classroom in the same week, month or semester? Are students clear on every skill they need and are we ensuring that they are competent at these skills? Are students regularly reflecting on their abilities, taking ownership of their own learning and working to improve their skills to reach competence?

This is where ACEND envisions the Future Education Model programs to reach for. We are taking baby steps and working towards this vision. We may not be quite there yet and that is because we are in the infancy stages of this demonstration project and we are learning and adjusting as we go. But I am confident that we will get there much quicker than anticipated because we are hearing from programs how much they appreciate
competency-based education and the difference it is making with their students.

Hopefully, this presentation gave you an understanding of competency-based education and the principles upon which the Future Education Model Standards were built.
Questions?