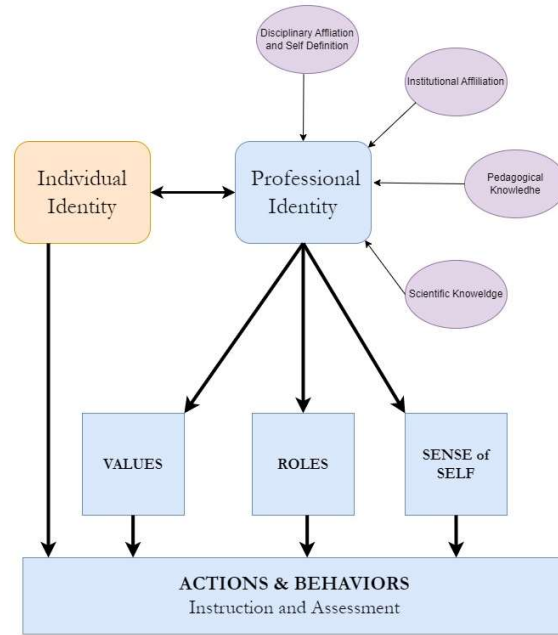


PROFESSIONAL IDENTITY

When an identity has been internalized it comes with associated values, roles and ways of being in the world



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CATEGORIES OF PROFESSIONAL IDENTITY

Identity Concept	Definition
Values	The ways of behaving that a person considers important in their life
Roles	The different types of role a person has with all associated expectations and meanings
Sense of Self	The perception of the collection of characteristics that define you

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PROFESSIONAL IDENTITY - VALUES

Specification	Example Statements
CRE Inclusivity	"I conform in terms of the commitment to broadening undergraduate research education particularly among UR groups who otherwise would not have access to a research experience."
Student Success	"Additionally, all SEA-PHAGES faculty overwhelmingly share a passion for our students and their success, and are invested emotionally in this process. Student success, whether it be research success, content mastery, or some other desired outcome, is our success, too; we take great pride in our students and their work. I share in their joy and excitement every semester at the first appearance of plaques, encourage them when experiments fail, and admire their vast accomplishments when they present their scientific findings in posters or presentations"
Community Membership	"I think providing students an opportunity to build community and connections with each other and with me in a class/lab environment that is welcoming, comfortable, collaborative rather than competitive, and open is really important, especially for first-year students – a big part of my professional identity in these courses is tied to fostering this type of environment for students",
Ownership/Agency	"I think the best part of teaching is seeing that students can take what they have learned in introductory and other courses, put it together, and do it on their own in different contexts and produce a professional product."
Science	"SEA-PHAGES faculty often treat students as scientific colleagues during the phage discovery process. In my own experience during the bioinformatics semester, we discovered an extremely unusual pattern of infection in which one phage seemed to infect an alternative host better than the original isolation host, and this difference was striking in terms of plaque morphology and titer. I was so excited to see these results when I looked in the incubator, and it was hard for me to avoid spoiling the results for students. I wanted to make sure that students "did the driving" in terms of interpreting these results, so I needed to tone down my level of excitement at the results until the class was able to reach conclusions together."
Overcoming Failure	"students would be forced into difficult, uncomfortable situations where the results could not be predicted, and failures could sometimes not be explained. They had to be able to show the students the educational value of failure, in that their time was not wasted by repeating experiments but instead provided with a new avenue to learn, oftentimes more than if the experiments went perfectly."
Persistence	"I'm deeply invested in helping students transition/acclimate to college-level learning and strongly believe that incorporating both authentic experiences in biology (i.e. phages) and metacognition into first-year courses can help students from broad backgrounds/levels of preparedness move through this often-challenging time."

GROUP WORK – VALIDATION QUESTIONS

1. Do the VALUES specified in this analysis make sense to you?
2. Are there any VALUES that you consider part of your professional identity as a CRE instructor that should be added to this list?
3. Are there any VALUES that you consider part of your professional identity as a CRE instructor that should be deleted from this list?

PROFESSIONAL IDENTITY - ROLES

Specification	Example Statements
Mentor	"The paragraph describes a committed teacher and a caring mentor. A mentor who motivates students and helps them grow. Person who has working knowledge of the science necessary to conduct the project and to run safely lab full of students."
Coach	"One of my discussion colleagues noticed a thread through my responses is that I act like a coach and watch students work (individual or group) and step in only when they are struggling and need support"
Scientist	"I am a member of a community of scientists and educators who work collaboratively to seek insights into bacteriophage evolution and enhance STEM education"
Educator	"We train students in a variety of laboratory and bioinformatic techniques and guide them as they analyze their results. As teachers, we teach scientific communication skills by having students document their work in a notebook and present their findings in written and oral forms"
Cheerleader	"I love that students think that I exude enthusiasm for the work they do in the lab and for the importance of their contributions to understanding aspects of phage biology."
Collaborator	"Early in the semester I am the expert, and they are the learner, however, as the semester goes along, we are more colleagues working towards a common goal"
Community builder	"I have always seen the main role of my course as building community, and my professional identity is mainly to facilitate the connections in this community"
Learner	"The program provides opportunities for professional development in both scientific and education research, and therefore I have been able to continuously grow and learn in both areas. "

GROUP WORK – VALIDATION QUESTIONS

PROFESSIONAL IDENTITY

1. Do the roles specified in this analysis make sense to you?
2. Are there any roles that you consider part of your professional identity as a CRE instructor that should be added to this list?
3. Are there any roles that you consider part of your professional identity as a CRE instructor that should be deleted from this list?

PROFESSIONAL IDENTITY – SENSE OF SELF

Specification	Example Statements
Dedicated	"To belong to a network of scientists with such passion for their work and dedication to their students is invigorating and inspiring"
Flexible	"My goal as a faculty is to be knowledgeable, confident in what I do and do not know, and flexible to be able to pivot or adapt to changing conditions"
Proud	"I am >30 years into my career as a University Professor. I have never be involved in a program that has given me so much joy from the student perspective. To get to watch in real time the growth and development of these young scientists is a reason I get up in the morning and still put in 60hrs a week. What I love doing in thinking up creative ways to make the challenge of research more approachable"
Multi-skilled	"All of us are a jack of all trades, meaning that we do most all of the prep, teaching, grading and engagement of the course. "
Valued	"We are valued for what we bring to the community in both the education and scientific areas. There is shared ownership of discoveries."
Community Member	"I strongly believe that I am functioning in an environment where I am on the same team with my students - we are in the research process together, neither of us knowing the outcome of the discoveries to unfold and all excited as we anticipate the next steps. " " feel so comfortable within the community of SEA-PHAGES faculty"
Responsible	"I feel a demanding sense of responsibility for student success, desiring to keep everyone engaged in the research process, and at times I blame myself when things go wrong. "

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GROUP WORK – VALIDATION QUESTIONS

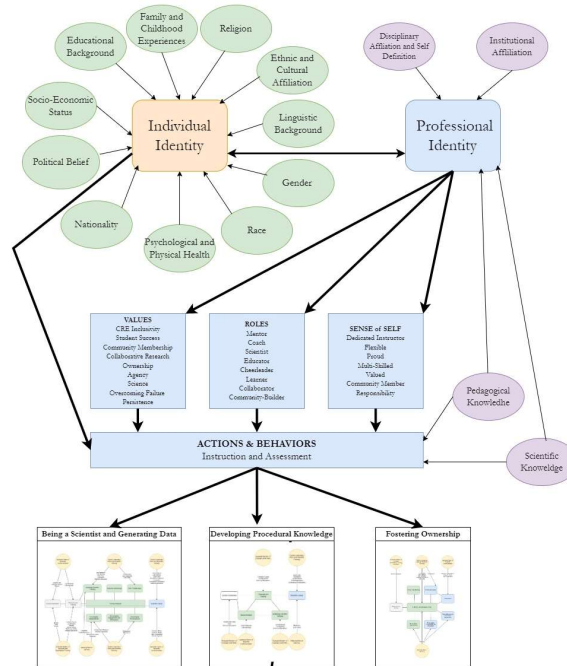
PROFESSIONAL IDENTITY

1. Do the aspects of SENSE of SELF specified in this analysis make sense to you?
2. Are there any additional ways in which you sense yourself as a CRE instructor that should be added to this list?
3. Should any of the current aspects of SENSE of SELF as a CRE instructor be deleted from the current list?

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A MODEL OF PROFESSIONAL IDENTITY

- The professional identity of a CRE instructor (with all associated values, roles and sense of self) informs the day-to-day, one-on-one interactions with students during CRE instruction.
- Since a CRE pedagogy involves extensive ad-hoc interaction and unscripted support, professional identity allows some insight into why CRE instruction is successful at promoting inclusion and persistence



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GROUP WORK – VALIDATION QUESTIONS

1. What are your thoughts on the full model of professional identity?
2. What would you like to add to this model?
3. Any there any components that you think should be deleted from this model?

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