

IEC Webinar Recap: Spark Better Learning: IEC Best Practices for Instruction

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Webinar Purpose

Provide IEC instructors with practical, proven strategies to improve apprentice engagement, retention, and learning outcomes across **in-person, virtual, hybrid, and bilingual** classrooms

Foundational Best Practices (All Class Formats)

Preparation Is Non-Negotiable

- Use the **IEC Instructor Resources course (CMS)** as your primary planning hub.
 - Best practices, errata, lesson aids, hands-on activities, PowerPoints, videos, and exams
- **Do the homework and quizzes ahead of time** to identify trouble spots.
- Create **written lesson plans with timing**.
- Arrive early and verify **all technology works**.
- Record classes when possible for student review and instructor self-evaluation.

Use a Clear Class Agenda

- A printed or digital agenda helps students:
 - Know what to expect
 - Stay engaged
 - Understand due dates and objectives
- Effective agendas include:
 - Attendance & quizzes
 - Planned breaks (ideally every hour)
 - Objectives for each block
 - Hands-on activities

Teach *with* Students, Not *at* Them

- Review prior homework before new material.
- Have students **work problems live**.
- Use example questions similar to homework.
- Ask **open-ended questions** (“What questions do you have?”) to prompt responses.
- Use **productive silence** to encourage participation.

Vary Your Delivery

- Different learners require different methods:
 - Lecture
 - Visuals (PowerPoint, diagrams, photos)
 - Whiteboard or demonstrations
 - Hands on labs and activities
- Don't just read slides; use the to **accentuate and summarize**.

Professionalism Sets the Tone

- Speak, dress, and behave professionally.
- Take safety seriously; students mirror instructor behavior.
- Learn student names and interests.
- Build relationships to increase engagement.

Standards Matter (Especially in Year One)

- First-year instructors **set the pace for all four years**.
- Be consistent.
- Enforce deadlines.
- Treat the classroom like a jobsite: tools, punctuality, and accountability.

After Class & Continuous Improvement

- Be available for questions after class.
- Offer limited, structured tutoring for committed students.
- Reflect after every session:
 - What worked?
 - What didn't?
 - What should change next time?
- Report new errata.
- Make sure to clean up the classroom.

In-Person Class Best Practices

- Create and follow lesson plans to avoid derailment.
- Document missed objectives and fold them into future lessons.
- Maintain classroom control; instructors are the “conductor”.
- Schedule regular breaks to increase retention.
- Keep a positive, enthusiastic attitude; it's contagious.

Assessment & Feedback

Quizzes & Exams

- Use quizzes regularly. (10-20 questions)
- Focus on recent material.
- Leverage ATP's Test Generator.
- Use IEC standardized exams to:
 - Measure student comprehension
 - Improve curriculum quality (anonymous data)

Interactive Learning Tools

- Games, polls, and challenges (Kahoot, Poll Everywhere, CMS tools)
- Hot Seat Challenge
 - Quick competition tied to class material
 - Random winner promotes fairness and fun
- Hands-on labs or demos (even paper-based when equipment is limited)

Online & Hybrid Classes

Online Instruction

- Always use your webcam.
- Keep a consistent schedule (treat it like in-person).
- Record sessions.
- Use polls, emojis, chat, and discussion forums for engagement.
- Use **NFPA Link** (digital NEC) live during instruction.
- Set designated virtual office hours.

Hybrid / Combination Classes

- If possible, use a second person to monitor chat.
- Ensure you provide equal attention to in-person and online students.
- Always stay camera-aware.

Bilingual Class Considerations

- Be aware Spanish NEC is usually one code cycle behind.
- Instructors must be fluent and confident translating current curriculum.
- Clearly communicate code changes between editions.

Apprentice Impact

Students value:

- Feeling known and respected
- Instructors who are prepared, approachable, and invested
- Engaging, relaxed environments that make learning enjoyable

Key Takeaways

- Preparation + engagement + consistency = better learning.
- Effective instruction doesn't require perfection; it requires intentional effort, reflection, and care for your students' success.